



ONE DOLLAR PER YEAR.

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THOMAS G. NEWMAN,
EDITOR.

Vol. XXIX. Mar. 10, 1892. No. 11.

Editorial Buzzings.

As the Babbling brook goes rolling
Onward day by day,
Whither grow the little pebbles
That lie in its way.

As the Springtime sun grows stronger,
Bud and leaflet grow,
And at length in flower and blossom,
All their beauty show.

Ivar S. Young, editor of the bee-paper of Norway, who visited America in 1887, died at his home in Christiania, Norway, on Dec. 10, 1891. He was nearly 55 years of age, and was one of the best bee-keepers of that country.

A World's Fair Bee-Keepers' Convention is pretty generally desired. The *Canadian Bee Journal* endorses the move, and urges the appointment of a committee to take charge of the matter at once. Shall we have such a convention—open to the world?

The Board of Lady Managers of the World's Fair have appointed the following as a committee on "Bees and Bee-Culture:"

Mrs. Charles H. Olmstead, chairman, Georgia; Mrs. James R. Doolittle, Chicago; Mrs. Eltza J. P. Howes, Michigan; Mrs. Mary C. Cantrill, Kentucky; Mrs. Frances W. Shepard, Chicago; Miss Phoebe W. Couzins, Missouri; Mrs. Walter Hartpence, Ohio; Miss Mary E. McCandless, Pennsylvania; Mrs. Edward L. Bartlett, New Mexico; Mrs. Parthenia P. Rue, California.

Until a Superintendent is appointed for the Apiarian Department nothing definite can be arranged, and no progress can be made. Perhaps it will come out all right, but the outlook is not now very encouraging.

Utah bee-keepers are now enjoying the benefits of organization. The *Inter-mountain* for March makes these remarks on the subject:

The bee-keepers of Utah have taken a noteworthy course, by forming a territorial association; the effect of such is being felt throughout the territory already. With the same amount of energy in proportion to its age, five years from now it is hard to tell what the result will be; suffice it to say that it is a very healthy youngster. Every bee-keeper in Utah should become a member; the entrance fee and yearly dues are only 50 cents, which should be sent to the Secretary.

Talk About the large bee of Java—*Apis dorsata*—and then think of the model just imported from Paris. It is 6 feet long, and more than that length from tip to tip of extended wings. You will be amused while reading the description of this wonderful model given on page 352 of this issue.

The Busy Bees, and How to Manage Them, is the title of a 24-page pamphlet by W. S. Ponder. It is intended as a 10-cent manual for those who may catch the "bee-fever." It is nicely printed, and is well worth the price.

Strange Freaks sometimes occur with bees. The following letter from Mr. E. B. Kauffman, of Brickerville, Pa., describes some of such freaks:

On Feb. 19 it was warm enough for bees to fly a little. I have one colony alone in the garden, to which I had introduced a young queen last Summer. At about noon on Feb. 19, it was warm, and the bees flew some. I then noticed that there was something wrong in that hive; the bees were very excited, and ran in and out. I tried to ascertain what was the matter, but did not succeed. They continued such actions until evening. The next day, about noon, I noticed a similar excitement among them, when I again tried to find out what was wrong. To my surprise I found the queen outside, a little way from the entrance, or near the place where she would have dropped from the alighting-board. I picked her up, and took her into the house; she was apparently dead. I tried to resuscitate her by heat. After a little while she began to move, and stood on her feet. I brought some bees in and put her with them under a glass tumbler, and gave them a little honey. The bees seemed to nurse the queen just like children would a sick mother, but on the day following she was dead. Now, what I would like to know is, what induced the queen to leave the hive in Winter? Had she been dead, I would have supposed that the bees dragged her out, but as it is I do not understand it. Will some of the experienced bee-keepers tell me through the *BEE JOURNAL* what was the trouble? I examined the hive, and found that they had plenty of stores, and seemingly everything was in good condition.

E. B. KAUFFMAN.

As the queen mentioned came from Mr. Doolittle, we requested him to reply to it, and here it is:

Some of these strange freaks of our pets are hard to account for. Twice in my life I have had queens leave the hive to die, just the same as worker bees always do, when the weather or circumstances will permit. At other times I have had workers so worry and tease a queen that she will run out of the hive and die rather than submit to that torture.

Very many times, if not always, the workers seem to know when a queen is

about to die from old age or disease, and, although manifesting the greatest alarm and agitation, as a whole colony, a few of the workers will proceed to drag the dying queen out of the hive and push her off the alighting-board to die. Sometimes she is thus left to die alone; but, oftener, a few of the "faithful ones" will stay by until she expires, and sometimes remain for hours after.

One Spring I lost nearly one-third of my queens in this way, and as this was years ago when I had black and hybrid bees, I was prone to lay the trouble to the kind of bees; but I have since learned that all queens, of all races, are subject to death at any time; though, as a rule, most of them do average good work until the end of the third season.

My experience with queens received from abroad proves that they are more liable to give out suddenly, than those which are never subjected to the rough usage all queens must endure by a long shipment in the mails or otherwise.—G. M. DOOLITTLE.

The Amateur Bee-Keeper is the name of a new pamphlet of 52 pages, by J. W. Rouse. As its name implies, it is a guide-book for beginners, and covers the whole ground of bee-keeping in such a pleasing style that it will prove a very valuable help to such, if they will but read it, and practice the methods therein described. It is published by the Leahy Mfg. Co., Higginsville, Mo., and can be obtained at this office. Price 25 cents.

Catalogues for 1892, are on our desk from—

John Andrews, Patten's Mills, N. Y.
G. H. Kirkpatrick, Union City, Ind.
J. W. S. Rupe, Mt. Vernon, Ills.
A. A. Weaver, Warrensburg, Mo.
Oliver Foster, Mt. Vernon, Iowa.
W. H. Laws, Lavaca, Ark.
J. E. Shaver, Friedens, Va.
Levering Bros., Wiota, Iowa.
E. H. Trumper, Bankers, Mich.
M. Crawford, Cuyahoga Falls, O.
I. F. Tillinghast, La Plume, Pa.

The Changes that this wonderful planet of ours daily undergoes are very interesting to contemplate. A correspondent describes some of them in the following very interesting manner :

During the approach and continuance of winter the earth throws off by radiation each night more heat than it absorbs in the daytime. While this goes on the temperature of the surface of the earth must continue to fall, and the cold of the atmosphere must penetrate deeper and deeper daily into the ground. As spring approaches the condition changes, and each night less heat is radiated than is absorbed during the day. The average temperature of the earth is therefore steadily rising instead of falling, and opportunity is given to the latent heat of the earth to manifest its influence; for, next to the primal source of heat—the sun—a very important source is found in the heat of the globe itself. While the surface is still frozen, therefore, and has not yet absorbed a sufficient surplus of heat to overcome the effect of the nightly loss by radiation, the ground may yet be thawing rapidly and perceptibly from below through the influence of the earth's latent heat.

Punctuality in doing anything required to be done is the most desirable thing in the world. Think of what a calamity it would be if the sun should make its appearance an hour or two, or even a minute or so late some day. Whatever is worth doing at all, is worth doing well and on time.

To apiarists this is a lesson of vital importance. The delay in not having all surplus receptacles on hand when wanted often costs a crop of honey. Very appropriate is the following from one of our subscribers in Iowa, who writes the following very amusing item :

An acquaintance once said : "Mrs. A. would be quite a nice neighbor if it were not for that third hand." I stared in wonder. "Don't you know," queried Mrs. A., that "little behind-hand of hers keeps her forever in a stew?"

Knowing Mrs. A., I saw the application, and then I began to wonder if some of the rest of us were afflicted with the superfluous hand, as well as Mrs. A.

Have we all got our Summer under-clothing all made before the time for house-cleaning comes? Did we plant

our slow-growing seeds in season? Did we replenish our table linen and bedding during the Winter months? If not, let us look out, or somebody will be laughing at our third hand. We won't laugh, however; as the saying goes, "the laugh will be on the other side of the face."

KIT CLOVER.

We are Often Pained when seeing the oft-repeated cruelty and inhumanity which daily come to light in this world, and then we are led to fancy that a cruel and heartless humanity has complete control of all mundane affairs, but it is evidently a mistake to come to such a hasty conclusion. We must, to be fair, look on the other side, and then we may change our pessimistic for optimistic views.

It is a good world this, after all. If it were not, then little Marie Petersen, a blue eyed child of five years, could never have crossed the Atlantic ocean and come from Sweden in charge of no one but herself to join her father in Philadelphia. Her mother died when she was a babe, and her father came to America to make his fortune. As soon as he got a little money he sent for the child, and the brave creature did not hesitate to start alone. It was the confidence of childhood and innocence, and to the credit of mankind it is not always betrayed. Marie spoke not a word of English either, and the only information the immigration officers at New York could get about her was contained in an envelope which she carried sealed in her pocket. This envelope held also a little money to be used in case of need, and thus the child had crossed the great sea under the guidance of the good spirits that reside in human breasts.

A Welcome monthly visitor is the ILLUSTRATED HOME JOURNAL, a fine publication for the family and fireside, devoted to fashion, music, household topics, decorative art, and interesting stories.—*New Bedford, Mass., Standard.*

Queries and Replies.

Packing and Marking Shipping-Crates.

QUERY 809.—1. What is the best way to pack sections in a shipping crate? 2. What are the best directions to be written on the crate, to insure careful handling by the freight or express companies?—Iowa.

Have had no experience in shipping honey.—A. B. MASON.

1. Four in length; 6 in width. 2. Glass, GLASS, GLASS! *Honey in glass!* —DADANT & SON.

1. Pack snug and tight, so the combs cannot strike. 2. "This is dynamite." —J. M. HAMBAUGH.

1 and 2. These questions can be better answered by those who produce honey for market, which I do not.—J. E. POND.

1. They will bear more knocking about when resting on the tops. 2. Comb-honey—handle with care.—M. MAHIN.

1. Upside down when they are not well fastened to the bottom. One tier high. 2. Leave the glass exposed. If they forbid that, write on "Dynamite. This side up with care."—P. H. ELWOOD.

1. I do not know, as I never shipped any comb-honey. We produce all extracted-honey, except a little comb-honey for our home market.—E. FRANCE.

1. I place them in the crate in the same order they occupied in the hive, as nearly as I can. 2. Use stencil for the directions. I mark: "Contents fragile. Handle with care."—J. P. H. BROWN.

1. Fourteen sections in a crate, glassed at one end. 2. Direct in the shipping-bill that the crates must be put crosswise of the car, and so secured that they cannot fall. Never ship by express.—R. L. TAYLOR.

1. What do you mean? Side by side, or how? Generally speaking, the same as they set on the hive. 2. Leave the honey so it will show through glass. This is better than any written directions.—G. M. DOOLITTLE.

1. Have one side of the shipping-crate glassed, and put the side of the section to the glass. If the sections are loose

in the case, pack paper between them and the side of the case, to keep them firm, and act as cushions to break all jars and jolts on the cars. 2. I do not think any is needed, or will do any good, for if there are directions, the chances are that they will never be read.—S. I. FREEBORN.

1. With the comb next to the glass. 2. I do not believe it makes any difference. My assistant suggests "Dynamite." The honey showing through the glass will do more to make railroad hands careful than anything written on the crate.—C. C. MILLER.

1. Combs parallel with glass. Glass parallel with handle of the shipping crate. 2. I use a label 10x14 inches, having on it a large "fist," and in large type the words, "Fragile. Handle with care. Load with hand pointing toward end of car or side of wagon."—J. A. GREEN.

1. Lay a strong paper in the bottom of the crate, which should be deep enough to allow $\frac{1}{4}$ -inch strips for the sections to rest upon, and holding 24 sections, single tier high. Wedge at the back to hold them firm and solid. 2. The printed "caution" labels on purpose for shipping.—MRS. J. N. HEATER.

1. I prefer to fit them in the crate lengthwise of the crate. Fit them closely so that they cannot jostle about in the crate. The rest will suggest itself. 2. Freight-smashers never look at written or printed directions. Glass sides to the crates showing the honey to the handlers is the best protection.—G. W. DEMAREE.

1. Have your crate just fit the number of sections you wish it to hold. 2. I do not know just what is best. But "Honey—With Care," answers my purpose. I would not think of trusting comb-honey with any express company. It will go by freight better and much cheaper.—H. D. CUTTING.

1. Have the crate of the right size to hold the desired number, and drop them in, after cleaning them of all propolis and burr-combs, if any. 2. Write no directions whatever on the crates; have a glass at each side or end of the crate (the sides of our sections come to the end of our crate or case). For safety, ship by freight rather than express.—JAMES HEDDON.

1. First, get the honey, then pack snugly, the point being that there should be no play between sections, or between

sections and crate. Have the outside rows as good as any, but endeavor to have the crate throughout as even as possible in quality, color, etc. 2. Ask some railroad man, but exercise your own judgment about his answer.—Mrs. L. HARRISON.

1. Pack them so they will not rattle around "like a handful of peas in a quart cup." The case should be just large enough to hold the sections, whatever the number. A pan made of wrapping paper to catch any leakage, and a thickness or two of newspaper over the sections, is an advantage.—C. H. DIBBERN.

1. To set them in a neatly fitting crate is as good a way as to use packing, in my opinion. 2. What I regard of more importance is, that every crate be properly labeled, so that freight men may know the nature of package at a glance. The right word to print on the label is "Fragile," and the letters should be about 1¼-inch block letters.—G. L. TINKER.

1. As I never shipped comb-honey in sections, I do not know; however, I would not use a crate holding more than 24 one-pound sections, and pack them so that there would be no shake to them. 2. I think the kindest request we can make the better, and always begin it with a "Please;" for by experience I have found that we can persuade or lead our railroad men better than to drive them (or almost any one else). If I should ship honey, I would say something like this: "Please handle this honey with care, for it is very tender. By so doing you will greatly oblige your friend—Jennie Atchley."—Mrs. JENNIE ATCHLEY.

Pack the sections bottom upwards, close together in single tier, parallel with the glass, so as to show what it is. Label the covers of the crates "Handle with Care—This Side Up," with a request to have them placed securely in the car, with the combs parallel with rails. Send by freight. It is much cheaper than express, and will be just as carefully handled.—THE EDITOR.

Open ye everlasting gates, swing wide!

Here comes a soul, a woman of sad face;
She was a servant, did her best and died.

A loving benefactor of her race.

Then came the love and joy the blessed win,
And more than conqueror did she enter in.

—JAMES B. WIGGIN.

Topics of Interest.

Temperature of Bees in Winter Quarters.

C. W. DAYTON.

Last October I prepared 4 colonies for Winter by contracting the brood-chamber to 6 combs, and putting on a solid inch thick honey-board, and letting the bees seal them down tightly. The latest flight the colonies had was on Nov. 16, and they were carried into the cellar on Nov. 20, where the temperature ranged from 32° to 40°. Fifty thicknesses of paper were spread over each honey-board.

After they were placed in the cellar they remained very quiet, but towards the last of January the honey-boards began to become concave on the upper sides by warping, and there came cracks between the lines of propolis at the edges so that I could look in and watch the actions of the bees. The bees remained absolutely quiet. I could see their bodies projecting above the top-bars, but there were no bees clinging to the cover board.

There were indications of moisture present in the form of large drops of water here and there on the cover, and also on the combs. This was the cause of the warped boards. By inserting the bulb of a thermometer into the cracks, and letting it drop down amongst the bees at the top of the cluster it indicated 61°. When the crevices were entirely stopped with paste so that no air could escape, the temperature remained at 64° in one colony, and 61° in another, and another 65°.

By the 10th of February, with the paste removed, I saw moisture attached to the honey-board the whole width of the hive, just over the cluster where the bodies of the bees could be seen projecting above the frames, bringing the bees and moisture within ¼ inch of each other.

Here were the tightly-sealed covers, and comparatively no covers to the brood-chambers, with a difference between the two modes of only 3°. If this is the real temperature of healthy bees, I wish to inquire where the force is to come from that produces a circulation outward through the entrance situated at the bottom of the hive. The idea that a healthy colony will keep the inside of the hive warm and dry from their natural warmth is a mistake, and

exists nowhere except in the imagination and theory. The thermometer does not reveal any such fact.

Now, I do not say that there are no colonies which will not show this amount of warmth; indeed, it was only necessary to turn my back to these tested colonies, and place the thermometer about $\frac{1}{2}$ inch from the cluster of a colony which was affected with diarrhea, and the mercury jumped to 80°.

Seeing that these colonies were doomed to destruction from the accumulation of moisture, they were carried out of the cellar into a bee repository where the temperature has not yet been down to 50°, or above 65°; usually standing at 62°.

When I lifted the boards and papers off the hives, water literally ran off from them, and the hives showed that moisture had condensed on the combs and inside of the hive, so as to run down and soak through the joints at the bottom.

Two hours in a temperature of 62° rendered the hives dry. The brood-chambers remained uncovered for awhile, and then there was spread over them two thicknesses of newspaper.

To this covering one of the colonies objected, and manifested their intentions by getting uneasy and gnawing three or four holes in the papers, directly above the cluster of the bees, and a nice cluster of bees came up above the paper, and then the colony became very quiet. In the three or four days following this the temperature was lowered from 62° to 56°, and all but 3 or 4 bees of the cluster had retired to the inside of the papers.

On account of some manipulations I wished to make with some other colonies, I continued to lower the temperature toward 50°, and as these bees had gone inside the hive, I thought a lower temperature would be cold on them, and I accordingly laid on the top of the papers a new $\frac{1}{2}$ inch pine board that was warped so as to leave a space under it like a Hill's device.

In lowering the temperature it was necessary to be absent about two hours; when I returned and was surprised to find this colony (previous, so still) now making a great uproar. On raising the board it was found to be warped exactly the opposite from what it was when put on, and hundreds of bees crowding in under it, and the paper had been removed for a space larger than my hand. The board was set on one edge against the hive, and there was immediately began the contented hum, and march back into the hive.

Although I brought a bright lamp and set it on one corner of the hive, only one or two bees paid any attention to the light. The temperature was then 52°. When the bees had become settled a piece of writing-paper was laid over the hole the bees had now made in the papers, and it was soon torn, and as the bees went at it in great force, it was crowded entirely out of the way, and the bees went back amongst the combs and became quiet, and did not enlarge the hole they had made in the paper.

One thing of importance noticed, when the bees were in this uneasy state, and trying to remove the cover was, that quite a number of bees, perhaps 50 or 75, crawled out on the cover papers, away from the rest of the bees and dropped their excrement, just as the bees in a diarrhetical colony will crawl upward above the entrance to the hive and void the same.

There is a peculiar motion to the individual bees when they leave the cluster for this purpose—they seem to have only one idea or thought, which is to get out and separate from the rest of the bees. They came threading their way through, turning this way and that, to get past other bees, while the main throng were marching the other way, keeping up a joyful hum. They appear about as heedless (or, perhaps, as headless) as people escaping from a burning building.

After evacuation, they remained motionless as if contemplating whether to wander further away from the hive and die, or return and undertake to live in it again. Hearing the hum of contentment set up by the other bees, they would turn their heads to one side and then to the other, and then scrambled back toward the brood-combs quite lively.

The bodies of these bees were not excessively distended. They could take wing easily and fly all-around the room. Now the question comes up: Was this diarrhea, or healthy evacuation of the intestines?

It looks to me as if there was some kind of atmosphere in the hives that caused it, and that the board and paper I laid on caused it to accumulate in the top of the hive. The entrance, $\frac{1}{2}$ x 16 inches, was wide open. Our, supposed to be, best authorities say that "noisome gases and vapors escape at the bottom of the hive." When the coverings are removed, the stench from the colonies rises to one's nostrils.

It looks as if this may have been a healthy colony. Still it would have been

charged as being afflicted with diarrhea. I have noticed some diarrhetical appearing colonies which seem to be in bad condition, that lived until Spring and then built up to good colonies. Other times they soon dwindled out in spite of all that could be done. One seems to be tenacity to life, and the other tenacity to death; yet they are mistaken for the same sort of affection.

As I was about to close this article the thought came to me to test the temperature of this colony in both its quiet and disturbed conditions. On going to the colony, now, after it had been quiet five days, I found the thermometer where I had left it above the cluster, lying on the top of the brood-frames, with bees on both sides of it, and two or three around the bulb, and it registered 59°. When it was raised $\frac{1}{2}$ inch above the frames it was 58°. Another thermometer which leaned against the hive and rested upon the floor of the repository registered 57°. Four feet above the floor it registered 60°. Twelve hours ago it was 64°.

Not disturbing the thermometer lying on the frames, a piece of newspaper was quietly laid over it, and then several thicknesses of quilts over the paper. After ten minutes the mercury had risen from 59° to 61°. At the end of 45 minutes it was 68°, with considerable excitement. At 75 minutes, it marked 78°, and was still on the rise, and the quilts and paper were taken away.

Two healthy colonies were tested under quilts, and in one the temperature was 63°, and in the other 61°. Two colonies which were afflicted with diarrhea three weeks ago, and kept up an uproar for ten days before they were set in the warm repository, are now comparatively quiet, and the temperature under the quilts was 64° in one, and 66° in the other. One of them objects to any covering to the brood-chamber.

As Mr. Muth speaks on page 191 of being tired of speculative articles, and having advanced more or less theory in some former communication, in this I have intended to deal with facts only.

Clinton, Wis., Feb. 23, 1892.

Skunks in the Apiary.

A. F. BROWN.

For the benefit of those who are troubled with skunks about the apiary, I should recommend a little "strychnine" beat up in an egg, as the most

satisfactory means of destroying them. Ten cents worth in a couple of eggs will get rid of all the skunks in the neighborhood.

I think it will be found to be a much more satisfactory method than fussing with a half dozen (more or less) traps, as recently recommended by a correspondent. For not one man out of a dozen would kill a skunk with a shot-gun, as recommended by another correspondent, without perfuming the whole neighborhood with the musk from the skunk. But when using strychnine, there is no such danger of "advertising" one's work.

I used to hunt and trap for the trade a good deal, and as skunks' pelts brought good prices, I made a special study of their habits, and the best means of killing them. From my experience I would say, as a hint to those who prefer to use the "shot-gun," to always shoot the "skunks" through the *middle of the back*, and then there will be no danger from there musk.

Another very satisfactory way, where you have one in a trap, and are near water, is to drown the skunk. By the means of a fishing-pole 15 or 20 feet long, slip the chain off from the stake, and lead the skunk right out into the water; when out beyond its depth, draw it under the water, and the job is finished. Work carefully, and you will have no trouble.

There is not a particle of danger of being "perfumed," as a friend puts it, if you work carefully and take your time to it.

To the novice at this work, I will say that more than once have I taken skunks out of both steel and box traps with my hands, and I never had the first bit of trouble.

Huntington, Fla., Feb. 14, 1892.

Grading of Comb-Honey, Etc.

M. H. MANDELBAUM.

About thirty members of the Northwestern Association were in attendance at the convention in Chicago, and that so small a proportion should be able to draft a set of faultless resolutions, seems improbable. On the last day, in fact the last two hours before adjournment, the resolutions on grading of honey were adopted. Our President, Dr. C. C. Miller, then congratulated us on having accomplished so much.

The resolutions were referred to Albany for revision, and I, as the maker of such motion, am disappointed with the progress there made. The question arises, what shall we now do to accomplish our aim? Let us all unite and send our ideas to the bee-periodicals. We can accomplish nothing by delay, and I am of the opinion that we can gain our point before it is time to harvest a new crop.

Should not the plan be, to first adopt "grades for honey," then decide on the topics, "size of sections," "size of crates," "style of package for extracted?" etc. These four points can be argued *pro* and *con*, and our leading editors then frame their adoption.

When we have accomplished this, we are in shape to cope with such an enemy or evil as "adulteration," and seek a wider field for "uses of honey." We must seek perfection in our own midst, and then remedy outside faults. Delay is useless; so everybody, to arms.

That we may not be successful in finding perfect laws, I am convinced, but do we not grade two of our most widely handled farm products, viz.: butter and eggs? At times, not often, buyer and seller cannot agree as to grade, and arbitration then decides. This can also be done with honey.

What benefit can we derive after adopting a set of rules? Every producer and merchant could have a copy. This would prevent shipments of honey to market that are unsalable, and would permit of exact quotations. I will not advance arguments, but if any discussions are contrary, will answer and endeavor to show merit to my views.

I will divide the topic. First, grading of comb; second, grading of honey. And for the former I cannot improve on those rules adopted in Chicago, except that I would call the first grade "Fancy;" the second, "First;" and the third, "Second."

Grades for honey I would have as follows:

Extra White, being water white; *White*, being what the word implies; *Extra C.*, straw color; *C.*, being between straw and dark; *D.*, being dark.

For explanation to above key, notice the following example: An apiarist writes, "I have 10 crates of first grade white basswood, 5 crates of fancy extra C. linden, or 20 crates of second grade D. buckwheat honey." By referring to the list, we know exactly how to respond.

All of our grading will be of no avail unless producers mark on the end of the

crate both quality and grade, as, for example: 1st, X. C., Linden; or, Fancy X. W. Clover.

Each package of extracted to be branded, for example: X. C., Sage; or, X. W., Alfalfa.

When the above is accomplished, and every package marked as to grade and quality, with the gross and net weights underneath, it will be a pleasure to show honey to buyers. But with no system, and every shipper using a different style of packages and sections, we have no uniformity; instead, we have extra labor that could be prevented, with but little work on the part of the producer. Let the opposition or advocates of this topic act at once, and we then are ready for the next question.—*Review.*

Chicago, Ills.

Wisconsin State Convention.

H. LATHROP.

The Wisconsin State Bee-Keepers' Association met at Madison on Feb. 4, at 10 a.m., Pres. Hatch in the chair. After the reading of the minutes, the President delivered his annual address, as published on page 287.

Discussion followed on the apiarian display at the World's Fair, and T. E. Turner, J. J. Ochsner, and Mr. Minnich were appointed to decide upon the best method of collecting the material to make a creditable display. This committee reported as follows:

1. That some proper person be appointed by the Association to arrange the honey exhibit of the State of Wisconsin for the Columbian Fair, and that the honey for the Fair be sent to his address in Chicago.

2. That surplus honey sent to him, not used in the exhibit, be left subject to the direction of each one sending the honey.

3. That each bee-keeper of the State be requested to bring a sample or samples of honey to our next annual meeting and state the amount of honey he can furnish for the Fair; and that the Executive Committee be empowered to make selections for the exhibit.

4. That the State be asked to grant \$500 to defray the expense necessary to make the exhibit.

This report was adopted. The subject of freight rates was taken up with the result that the Association decided through its Secretary to request the

officers of the Bee-Keepers' Union to lay our application for lower rates on extracted-honey before the Western Classification Committee.

AFTERNOON SESSION.

Mr. Kirkland, of Jefferson, and Mrs. Winans, of Janesville, were introduced as members of the State World's Fair Commission; they gave assurance that the commission would render all the assistance in their power to aid the bee-keepers of the State in making a worthy display of their sweet product at the World's Fair.

An essay on the "Mutual rights of bee-keepers" was read and discussed. It was said that while there was nothing *legally* wrong in the bee-keeper bringing bees into a field already occupied, it was, as a rule, unwise and not neighborly.

Mr. Hoffman, of Monroe, advised that bee-keepers buy up the honey offered by small producers, and thus prevent its being thrown upon the market at a low price; thus ruining the market for others.

Mr. Turner, of Sussex, said he had succeeded in educating the small producers in his locality so that they would come to him and ask what honey is worth. This he had done by offering to buy their honey when offered at a price lower than the market justified.

Mr. C. A. Hatch read an essay on "Extra Combs." He considered it very important to have a good supply of extra combs on hand, and the amount should be three extra sets of combs for each working colony, Spring count. The use of comb-foundation, he said, was an advance in bee-culture, second only to the movable frame hive. It should be used in full sheets as much as possible, to prevent the building of drone-comb. Mr. Freeborn said there were times when an extra set of extracting combs would be of great advantage to comb-honey producers; they should be placed on the hives in cases of sudden and heavy flows of honey, as the bees could not at such times build combs fast enough to receive it.

Mr. Hatch stated that the managers of the Wisconsin State Fair had offered to increase the premiums on honey from \$40 to \$100, and hoped thereby to induce bee-keepers to make a display worthy of the State.

The following were appointed a committee to revise the State Fair premium list: Arthur Wilcox, J. J. Ochsner and C. A. Hatch.

FRIDAY MORNING SESSION.

The Committee on Election reported, recommending the following for officers for the ensuing year:

President—C. A. Hatch, Ithaca.

1st Vice-President—Mr. Standish.

2nd Vice-President—J. J. Ochsner, Prairie du Sac.

Recording Secretary—H. Lathrop, of Browntown.

Corresponding Secretary—Dr. J. W. Vance, of Madison.

Treasurer—M. J. Plumb, of Milton.

A resolution offered by Mr. Standish that R. L. Joiner, of Wyoming, and Joseph Henderson, of Springdale, be made honorary members of this society on account of services rendered by them to the bee-keepers in connection with the foul-brood act, was unanimously adopted.

Mr. Danniher, of Madison, asked if any one could tell how to get the most surplus honey from a colony in a box-hive, without increase. This seemed to be a stunner.

Some suggested to knock the box-hive to pieces, and transfer to movable frames.

Mr. Danniher answered as follows: When the lower part of the combs in the box-hive are whitening with new honey, take a hive full of frames of empty comb, and place it on the stand occupied by the box-hive, cover it with a board, out of which a large hole has been cut; place the box-hive over this hole, and fasten up all other openings, the bees will then fill the frames in the lower hive, which can be extracted and returned. The bees will rarely swarm when treated in this way, and they are sure to winter well, having a good supply of honey in their own hive.

Mr. Danniher also stated that he was wintering a "colony of bees in a jug," this caused a ripple of laughter. Those present will never forget the fun and good humor caused by his quaint expressions. One thing was evident to all, he is no novice, but one who understands the bees-ness.

It seemed to be the almost unanimous decision of the convention that it was best to allow the bees to do as they pleased in regard to pollen, and not go to the trouble of removing it from the hive, as advocated by Mr. Heddon, of Michigan. In most localities artificial-pollen feeding was unnecessary.

Out-door protection in Spring was taken up. It was thought by most of the members that special out-door protection of hives in Spring would not pay

for the extra expense and trouble, but that protecting the yard by high-board fences, or otherwise, would pay.

J. J. Ochsner carried off the North American Bee-Keepers' Association silver medal.

It was voted that Mr. Hatch and Mr. Turner be authorized to go to Milwaukee to confer with the World's Fair Commission in reference to Wisconsin's honey exhibit, and that the expenses be paid out of the grant from the State.

Bee-Keeping in Florida.

MRS. L. HARRISON.

Mr. Craycraft's prayer (page 82) is answered. I am spending the Winter in Florida, but as yet I have found no bee-keepers worthy of the name. All the bees that I can hear of in this town, are 8 or 10 colonies of blacks, which manage their own affairs, principally.

I am told that there are very extensive apiaries located at Wewahatcha, Fla., and I am going to visit them on my way home; if I do, I will tell you about them, and whether they produce comb or extracted-honey, and their reasons for so doing.

I have just been out in the yard with the broom, but I must confess that I could not run the handle down to water. If I had gone over to a ti-ti in sight, perhaps I might. The lady must have been mistaken.

Our party came with a livery team from Chiply, 52 miles distant, and as we passed houses, I would see bed-clothing hung out in the sun. It puzzled me to know why women should hang out their gaily-patched quilts to fade. I saw the same thing here, and on making inquiries I was told that good house-keepers habitually hung out their bed-clothes to dry out the dampness once a week.

The palings on the fence opposite keep falling off like Autumn leaves; the nails rust off. Stoves rust, and you cannot pull a pin out of a cushion. Bees may build comb here just as well as in Illinois, but I doubt very much its keeping any length of time after it is removed from the hives. I should expect that it would get watery, and burst the cells, unless kept in a well-ventilated room with fire heat. The comb-honey that I have bought here, was cut out of the top of a hive, and kept in a tin can, all broken up. It would not sell in my market at all.

I saw bees working to-day (Feb. 17) on peach-bloom. Strawberries are blooming; and the yellow jessamine is opening; I saw a vine to-day on the side of a house, and it was lovely.

Hives are very populous, and the bees are busy carrying heavy loads of pollen of a pale yellow color. I heard this evening of an apiary located three miles away, which I will visit in a sail-boat, if the wind blows in that direction.

St. Andrews' Bay, Fla.

Philadelphia Bee-Keepers' Convention.

The tenth annual meeting of the Philadelphia Bee-Keepers' Association was called to order by the President, at Philadelphia on Jan. 23, 1892. The Secretary read the minutes of the previous meeting, which were approved as read.

The President then called attention to the work which had been accomplished by the Association since its organization ten years ago, and stated that the Secretary had prepared a brief history of the Association, which he would read after the routine business had been disposed of.

He also reported a communication from Dr. C. S. Dolley, Professor of General Biology at the University of Pennsylvania, from which he hoped an opportunity would be afforded to the members of the Association for seeing the model of the honey-bee recently imported from Paris. The following is a description of this splendid model, taken from the *Philadelphia Record*:

MODEL OF THE HONEY-BEE.

"An immense honey-bee has been imprisoned in one of the rooms of the University of Pennsylvania. It is fully 4½ feet from sucker to sting, and measures nearly 6 feet from tip-to-tip of wings. This is the largest bee ever seen in this part of the country, at least, and if it could feed on clover blossoms, would make necessarily a great honey-producer, for its honey-bag is big enough to store away a whole comb. But there is little danger that it will escape from imprisonment to the fields, as it is made entirely of papier-mache. This huge imitation has been purchased for the use of the students in the Biological Department of the University. It was manufactured in Paris by an ingenious artificer, Emile Deyrolle, who is famous for being the unique constructor of such biological working models.

"The big, shiny bee is perfectly articulated, molded and jointed together, true to the busy little 'yellow-breeched philosopher' of the fields after whom it was fashioned. Wings, head, thorax and abdomen can all be disjointed by the simple surgery of thumb and finger, the head may be trepanned, displaying the small brain and physiological machinery within, thorax separated, and the abdomen disemboweled. Every organ artery, vein, fold, sinew, tissue, has been carefully reproduced in exact proportion with a delicate fidelity half lost sight of in so large a model. Dean Charles S. Dolley intends that the pupils of his department shall dissect this big bee, and study it until they become experts in bee architecture."

The annual election of officers for the ensuing year was then held, and resulted in the following choice:

President—Dr. H. Townsend.

Vice-President—Henry M. Twining.

Secretary and Treas.—F. Hahman, Jr.

Librarian—Miss Dora Davidson.

After a vote of thanks to the retiring officers, the Treasurer's report was read and accepted, showing a balance of \$18.36 in the treasury.

The Secretary then read his brief history of the Association as follows:

PHILADELPHIA BEE-KEEPERS' ASSOCIATION

On the evening of Jan. 23, 1882, there assembled at the residence of Dr. H. Townsend, 1514 Vine Street, Philadelphia, eight gentlemen. They met in response to a call issued for the purpose, as the postal card convening the meeting stated, of forming a bee-keepers' association. From this humble beginning, started just ten years ago this evening, in this very room, there originated the "Philadelphia Bee-Keepers' Association," one of the most solidly established and prosperous bee-keepers' associations in America.

Although never counting over 60 members on its roll at any time, and its influence and reputation never extending beyond its own sphere, it has gone on persistently with its regular monthly meetings, through prosperity and adversity; ever steadfast, ever a credit to its founders, an inexhaustible fund of pleasure, and a vast educator of the ladies and gentlemen comprised in its membership.

The Philadelphia Bee-Keepers' Association has never made a great stir in the bee-keeping world, and many of the prominent apiarists of America may not

even know of its existence; but, nevertheless, it has accomplished more than have the majority of bee-keepers' associations of this country, its membership has mostly been composed of ladies and gentlemen whose desire for knowledge and interest in the wonders and teachings of nature led them to the scientific pursuit of apiculture, hence it has mainly been an association of amateurs, and not one of large honey-producers.

The first thought of the inception of a bee-keepers' association originated with Dr. H. Townsend and Thos. F. Wittman, who issued a call to the bee-keepers of this city and vicinity to meet at 1514 Vine Street, on the evening of Jan. 23, 1882.

The eight founders of the Association were: Samuel T. Ramsey, Dr. H. Townsend, Geo. L. Miller, Thos. T. Crosley, Thos. C. Davidson, Thos. F. Wittman, C. H. Beeler, Jr., and F. Hahman, Jr. Of these members three are still with the Association, viz.: Dr. H. Townsend, T. C. Davidson and F. Hahman, Jr.; three have been removed by death, viz.: Samuel T. Ramsey, Geo. H. Miller, and Thos. T. Crosley; while the remaining two, Thos. F. Wittman and C. H. Beeler, Jr., resigned from membership a few months after the Association was started. On Jan. 30, 1882, the second meeting was held, when a Constitution and By-Laws were adopted.

Among the earnest workers who joined the Association in the early part of its existence were Mrs. M. L. Thomas and Arthur Todd. Mr. Todd was indefatigable in his efforts to further the interests of the Association, and much of the success of the society was directly due to his energy; through his sudden death, on Feb. 11, 1888, the Association sustained a great loss.

Mrs. Thomas, who has also aided the Association in a number of different ways, is now a resident of New York city, and was elected to honorary membership at the time of her removal to that city.

Of the good work accomplished by this Association the greatest was, without question, the bee-exhibit at the Pennsylvania Agricultural State Fair, in September, 1884. The exhibit made by the Association and its members was a grand success, and occupied a large tent which was crowded with visitors daily. A large number of colonies of bees in observation hives was a source of wonder to the public, and every conceivable product derived from honey and wax was exhibited. The wax exhibit was undoubtedly the best and most complete

ever attempted in this country. The honey exhibit, though small, was also good, none of the members being large honey-producers.

A number of magnifying glasses gave the public a better view of the anatomical structure of the bees, queen and drones. Several nuclei colonies, in observatory hives, were on exhibition, fully equipped in rearing queens. An exhibition of transferring bees from box-hives into movable-frame hives was also given under the large wire-gauze tent belonging to the Association, also the operation of extracting honey from the combs. A book of registry for bee-keepers was also kept in the tent, and among the strange and mysterious visitors who registered therein were the King of Kamtschatka and the Emperor of Japan.

Another noteworthy incident in the history of the Association was the reception tendered Mr. T. W. Cowan, Editor of the *British Bee Journal*, who, accompanied by Mrs. Cowan, visited Philadelphia while making a tour of Canada and the United States in the Fall of 1887.

The reception was held on Sept. 26, 1887, at Carpenter's Hall, on Chestnut Street, famous as the meeting-place of the first Congress of the United States.

Mrs. Thomas, in a few well-chosen remarks welcomed the distinguished visitors to our city. Mr. Cowan responded in a cordial manner, and gave his listeners a detailed account of the workings of the British Bee-Keepers' Association, which was listened to with marked attention.

The powerful microscope which Mr. Cowan carried with him was adjusted, and the members, forming in line, viewed the various parts of the honey-bee, with which the majority were familiar, though they had never seen them through a glass of such power; the Association having had many former microscopic exhibitions, with such glasses as were at their disposal.

In writing of his trip through the States, Mr. Cowan, in a subsequent number of the *British Bee Journal*, remarked that he met the most scientific bee-keepers in Pennsylvania; certainly a great compliment to our Association and the members. It may also be added that the Philadelphia Bee-Keepers' Association was the only organized body of apiarists who tendered Mr. Cowan a reception on his trip to the United States.

The most useful branch of the Association is its Library, composed of books and bee-literature of all kinds. A number of foreign bee-periodicals are also

kept on its files; in it are also to be found a number of old bee books, in which ideas on bee-culture are expressed that afford great amusement in the light of modern science.

The Association imported the first charts of the physiology and anatomy of the honey-bee from England. They have figured in an endless number of lectures before the Association and other assemblages.

The minutes of the Association for the ten years form a vast fund of information on an innumerable variety of bee-matters, and as a book of reference of the work accomplished are of great value.

The offices of President and Secretary of the Association have been filled for the whole term of ten years by Dr. H. Townsend and F. Hahman, Jr., respectively.

To Dr. Townsend, for his unflagging energy in the labor for the constant advancement of the welfare of the Association, the members feel deeply indebted. He has been ever ready to burden the hard work upon himself, at all times on the alert for new ideas in bee-keeping, and on the look-out for the merits possessed by new inventions, of bee-appliances to be brought before the members, to be explained and lectured upon; and when he thus appears at the meetings, laden down with papers, bee-periodicals, boxes and packages, charts and diagrams, he then feels happy—happy because he is rendering a service to his fellow men.

As we now pause, and look back over the first decade of our existence as an Association, at the strides we have made in the science of apiculture since our humble beginning; as we recall the ties of friendship which bind us together, and to the memory of those who have fallen by the wayside, and passed into "the Valley of the Shadow of Death," may we not humbly hope that it may be said unto us: "Well done, thou good and faithful servant?" and as we turn to the future, ready to take up the onward march, to overcome new difficulties, to place bee-keeping on a higher plane than it ever occupied before, let us go forward with renewed energy and vigor, onward and upward. "Excelsior."

After the reading of the Secretary's sketch, Dr. and Mrs. Townsend invited the members to partake of a collation, served by them in honor of this anniversary.

The table in the dining room, to which the members adjourned, was loaded with good things, the center piece, consisting of a large cake, ornamented with the

inscription, "From the Bees to their Keepers, 1882—1892."

The guests enjoyed themselves royally, and Miss Dora Davidson entertained them with several recitations.

After having done full justice to the repast, so bountifully provided, and tendered a vote of thanks to their kind host and hostess, the meeting was adjourned.

Apicultural Notes from Texas.

A. C. ATEN.

The Winter appears to be about over here, although we may have some freezing yet. Quite often, however, we have no freezing or frost after this time.

Bees have been busy carrying in pollen on fine days for several weeks, and peaches will be in full bloom in a week, if the weather stays warm.

We have no difficulty here in wintering bees if they have plenty of honey, as it is seldom they are kept in their hives over a week at a time without a flight. The most perilous time for bees in this part of Texas is in April, when quite often there is no honey-producing plants in bloom, their stores are exhausted by brood-rearing, and they starve to death unless fed. At that time, when the honey is all gone, they will attempt to live on pollen, and it will give them the diarrhea every time, no difference how warm the weather is, how dry and nice the combs are, or how sweet and perfect the pollen. Then give them a feed of honey, and they will be all right in a day or two.

These are facts that I have witnessed many times—in fact, I have more or less of such cases almost every year, for in managing nearly 200 colonies, it takes very great care, indeed, if I do not let some starve to death before I am aware of it.

We had a pretty cold time this Winter, with snow 3 inches deep, and the mercury down to 20° above zero, which was pretty cold for this part of Texas.

MARKINGS OF BEE-PROGENY.

If I understand some of the writers of the *AMERICAN BEE JOURNAL*, they contend that the daughter of a pure Italian queen mating with a black drone, will produce well-marked Italian bees. Of course this is all guess-work, for it is nothing uncommon for the daughter of an imported queen to produce hybrids, some of which will show little if any

yellow. Why make such assertions when it is impossible to know certainly?

ITALIAN AND BLACK BEES.

And still some writers contend that the blacks are as good or better than the Italians. Well, perhaps so in some places, but certainly not here. I have had both kinds for the last ten years in Texas, and the Italians are the best in every way, except in working for extracted-honey the blacks are much easier to get off the combs, if they have much surplus to extract, which is seldom the case.

A pure black colony with me is almost worthless. Hybrids generally do pretty well, but my largest yields of honey are generally from pure blooded Italians. Those who like the blacks the best, are certainly welcome to keep them.

HONEY-DEW.

I never have any honey-dew here, but have seen plenty of it, and while undoubtedly the greater portion and worst quality of it is the secretion of plant-lice, I have seen some, and plenty of it, too, that no living man could prove was the product of any insect. It appeared to have come down like "manna from Heaven," and the hickory leaves were loaded with it, and it was not bad honey, if honey at all.

We had plenty of rain last Fall and this Winter, and everything so far is favorable for a good yield of honey. Wheat and oats are looking well, and farmers are just beginning to plant corn.

Round Rock, Tex., Feb. 22, 1892.

Crop of Red Clover Seed.

I. W. ROLLINS.

I would like to enquire in relation to the crop of red clover seed in the various localities represented by readers of the *AMERICAN BEE JOURNAL*.

There has usually been a large amount of seed grown in this part of Minnesota, but in the Fall of 1890 there was a light crop, and in the Fall of 1891 there was no seed in the medium clover, and but little in the mammoth variety.

The first crop of medium blossomed as usual, and was cut early, as a rule, so that a crop of seed might be secured. The second crop grew well, was a heavy burden, but when the blossoms should have made their appearance, there was only a bald head—not a red blossom to

be found on an acre. On examination of these heads, I found they were full of larvæ of a light-pink color, and hundreds of them in a single head. They seemed to be at the point where the honey is when they are perfect blossoms.

I made numerous inquiries of farmers and threshers, but no one could tell me why there was no seed. They said the clover was all "bald-headed," and no seed in it. Not of whom I inquired had found the reason.

The crop of Alsike clover seed in this section was the heaviest we have ever raised, some pieces yielding seven or eight bushels to the acre. I imagine one reason of the large yield was, that there was but little honey in the white clover, and the bees worked the Alsike for all it was worth.

Elgin, Minn., Feb. 27, 1892.

Wayside Gleanings.

Our heaviest burdens are those we borrow.

How easy it is to admire people who agree with us.

It is a great deal easier to be contented without riches than it is with them.

The greatest blockhead is the one whose mistakes never teach him anything.

If the earth were covered with flowers all the year round the bees would become lazy.

Any fool can ask questions, but it takes somebody who knows something to answer them.

Paint the tools and they will last longer.

Irregular feeding makes an uneven fiber of wool.

Numbered with potatoes that are everywhere receiving commendation are the varieties Rural New Yorker No 2 and the Thorburn potato.

In pruning small orchards the thumb and finger were declared to be the best implements that could be used at the California State Horticultural society.

There are no disadvantages to be cited against obtaining seeds, trees, etc., from points considerably north of where the planting is done. We are not so certain that the reverse of this rule, in going toward the equator for planting stocks, is equally true, says The American Gardening.

CONVENTION DIRECTORY.

Time and place of meeting.

1892.
Apr. 6, 7.—Texas State, at Greenville, Tex.
A. H. Jones, Sec., Golden, Tex.
Apr. 7.—Utah, at Salt Lake City, Utah.
John C. Swaner, Sec., Salt Lake City, Utah.
Apr. 21.—Colorado State, at Golden, Colo.
H. Knight, Sec., Littleton, Colo.
May 5.—Susquehanna Co., at Brooklyn, Pa.
H. M. Seeley, Sec., Harford, Pa.
May 28.—Haldimand, at Nelles' Corners, Ont.
E. C. Campbell, Sec. Cayuga, Ont.

In order to have this table complete, Secretaries are requested to forward full particulars of the time and the place of each future meeting.—THE EDITOR.

North American Bee-Keepers' Association

PRESIDENT—Eugene Secor., Forest City, Iowa.
SECRETARY—W. Z. Hutchinson.... Flint, Mich.

National Bee-Keepers' Union.

PRESIDENT—James Heddon . . Dowagiac, Mich.
SEC'Y AND MANAGER—T. G. Newman, Chicago.

Bee and Honey Gossip.

Do not write anything for publication on the same sheet of paper with business matters, unless it can be torn apart without interfering with either part of the letter.

Good Prospects for Clover.

I found every colony of my bees alive last Spring, and commenced the season with 72 in fair condition. Increased to 90 colonies, and obtained 5,043 pounds of honey, all extracted but about 150 pounds. Included in the above was 1,300 pounds mixed with honey-dew. I had no white honey. Bees are going through the Winter here so far in fine condition—no loss so far. The prospects are fine for clover this season. We live in hope.

BYRON ILIAMS.

Worcester, Mo., Feb. 24, 1892.

The Bee-Keepers' Union.

I am surprised that the whole list of members of the National Bee-Keepers' Union is so small. Of the bee-keepers in the country we ought to have a membership of 10,000, then we should be a body that would be invincible. The work that has been done shows what a few can do; if that number was largely

increased, we would bear down all opposition by sheer numerical strength. In cases of Unions of this nature, I think of the noted "Shay Rebellion." Washington, when asked how many men it would take to put it down, was told, say 5,000; he at once replied, if 5,000 will do it, take 10,000, and there will be no trouble. So, with us, while a few presenting a bold front may work great good, if he had a big body, we should prevent many encroachments on our rights, that we have to fight. But the great trouble is this, as I look at it: While many scientific men are bee-keepers, as a rule bee-keepers are far from having any knowledge of science. Too many of them run in the old ruts of 50 or 60 years ago, claiming they know it all.

J. E. POND.

North Attleboro, Mass.

Folding Honey-Sections.

I have been amused in reading the different ways men have of dampening sections before folding. I have used the one-piece section since first invented. I keep them dry, and fold without moistening. I have kept some five years in a dry place, and they folded as well as new. It looks to me as though dampening the inside would swell the shoulder and strain the joint more than when dry.

C. L. LOVELAND.

Plainview, Minn.

[When sections are dampened, it should be on the outside, not the inside, as contemplated by Mr. Loveland in the above.—ED.]

Carrying Pollen—Mailing Queens.

Bees commenced carrying the first pollen on Feb. 13, which they gathered from red elm. The colonies having plenty of stores have brood in three to four combs, with many young bees gnawing their way out; and should this fine weather continue, the roar of the drones will ere long be mingled with the merry hum of the busy bees. Some of our correspondents wish to know if queens are actually sent through the mails in March. I will explain how they may be sent in March, or even in February. Use a modified Benton cage; fill one partitioned space with candy, first covering the cage with flannel, or other woolen cloth, making a hole for air to correspond with the hole in the lid. Then nail on wire-cloth and the lid. Thirty

or 35 workers should go with the queen. Then wrap the cage with good wrapping-paper three times around, and punch a few holes through the paper to correspond with the hole in the lid, for air. A queen put up thus should go to any part of the United States or Canada with reasonable safety. The most trouble has been found in sending queens during very warm weather, and as few workers as eight to accompany the queen seemed to be too many.

J. N. COLWICK.

Norse, Texas, Feb. 22, 1892.

Good White Clover Season.

Up to date my 75 colonies of bees are wintering well. They will all survive the Winter, if the stores do not fail. Last season was remarkably good for white clover honey, of which I got a few pounds over 2,000. The weather cut off the Fall supply, making the white clover honey fill the place of surplus and stores.

J. F. LATHAM.

West Cumberland, Me., Feb. 29, 1892.

Queens Purely Mated.

If Mrs. Jennie Atchley will use my method she will have better success in getting queens purely mated. It is as follows: "I have commonly selected one imported queen to breed drones from, crowding her at drone laying, and then distributing the drone-brood through the yard to hatch. If drones are in all parts of the bee-yard, they are much more likely to be flying at all times of the day than when all are in one hive."

JOHN ANDREWS.

Patten's Mills, N. Y.

Black Bees and Queen-Breeders.

I have read, on page 253, John H. Blanken's article. It surely sounds like inexperience, that causes him to prize the black bees so highly above all other races. That they have some good points we must all admit, but the bread-and-butter side of the question for me says that Italians are just as far ahead of the blacks as Jay Gould's railroad-car is ahead of the old-time ox-wagon. I have kept both blacks and Italians for 20 years, and have long ago decided on that question. In really good honey years we cannot see so much difference between the two races as to the amount of honey gathered, but when dry or bad seasons come, the Italians rush right

ahead, and make their own living, and sometimes store some surplus honey, when the blacks are starving, and bothering the Italians by trying to steal. Of course, there are some who still hold on to the old ox-wagon, and some still hold on to the black bees, and I suppose always will. In our articles to the public, let us try to give the real practical and experienced part of bee-culture, and let the imaginary part remain with us.

MRS. JENNIE ATCHLEY.

Floyd, Tex., Feb. 27, 1892.

Phenol for Foul-Brood.

I want to know what Prof. Frank Cheshire means by 1-200, 1-400, 1-500, 1-750, etc. He gives syrup phenolated by 1 in 500. He sprayed with water 200, phenol 1. What kind of syrup did he use—sugar or honey? How much sugar or honey to a pint of water, and so on?

CHAS. W. LEAH.

Spanish Fork, Utah.

[He means one drop of pure phenol to 200 drops of the syrup, when he puts it thus: 1-200. It is sugar syrup made by 1 pound of sugar to 1 pint of boiling water.—Ed.]

Gathering Pollen and Rearing Brood.

My bees have wintered finely. We have had but one week of Winter weather. The bees had a flight every week but one, and on Feb. 15 they commenced to gather pollen. On Feb. 20 they were gathering honey. I examined them and found brood in from one to three frames.

GEO. W. MOORE.

Milton, Oreg., Feb. 26, 1892.

Experience in Hiving Bees.

Last Spring I bought 15 colonies of bees, and increased to 30. The season was very poor in this locality, and the bees stored very little surplus honey. My bees are in good condition now. I tried a great many of the new devices for handling bees, some to my satisfaction, and some greatly to my sorrow, especially the hiving-box. The first time I tried it, a neighbor bee-keeper, who is a skeptic to new fixtures, was present. I took the box, punched into the cluster, and emptied it at the new hive, saying, "There is a scoop-shovel of bees." But the next dip I made, about a thousand or more bees showed fight. While the

battle was increasing in the bees' favor, my neighbor, who had retreated to a safe distance, was having lots of fun at my expense. I called my wife to bring the smoker, and with her assistance I hived the bees with both eyes swelled shut, and my hands and arms swelled so badly that I could not work for three days. With the assistance of a veil and a pair of leather mittens, I hived the next swarm more conveniently, but I intend to still keep bees.

J. L. LUDWIG.

Delphos, O., March 1, 1892.

Fine Country for Bees.

We have 150 colonies of bees in good condition, and want to increase them to 300 colonies the coming season. This is a fine country for bee-culture.

DUNCAN & CONRAD.

Du Pont, Ga., Feb. 29, 1892.

Planting Basswood Trees.

I am about to send to a nursery man for 500 basswood trees. I see that he has three kinds advertised, viz.: American Seedling, European, and Large Leaved. I would like to ask Minnesota apiarists which would be best for a Minnesota climate? and which is best for honey, all things considered? I would like to have this question answered through the AMERICAN BEE JOURNAL in time for my use this Spring.

J. E. CADY.

Medford, Minn., Feb. 29, 1892.

Careless Bee-Keeping—Making Hives.

Bee-keeping is dull here. Some few people have bees in box-hives around in the fence corners out of the way, and hardly ever see them except in swarming time, when they hunt up an old "gum" that the bees died in the Winter before. Such bee-keeping as that will never do. I wish some one would tell me through the BEE JOURNAL how to make Simplicity hives, what length and width to make the frames, etc. I take the AMERICAN BEE JOURNAL, and could not well do without it at the price. Bees are doing well here, considering their treatment. Hardly any have died this Winter, and they are flying nicely now.

J. BUNYAN S.

Spurger, Tex., Feb. 22, 1892.

[The only safe way, if you want to make hives, is to buy one of the kind desired, and use it as a pattern.—Ed.]

Mating of Queen-Bees.

On page 262, Geo. S. Wheeler says he has no doubt but a large part of my queens are not purely mated. Although these queens now have beautiful bees from their own eggs, with all the markings of pure Italians clustered all around them this cold day, yet Mr. W. thinks they are hybrids, or at least a large per cent. of them are. I cannot believe that he is correct in this view of the matter. I shall test the matter next Summer. I believe that the blood of the male bee will tell on the young queen every time, no matter whether it be a black queen or an Italian queen. If a black queen meets an Italian drone, her young bees will tell the tale on her, and the same is true with the Italian queen—if she mates with a black drone, her young bees will tell what no one knew before, namely, that when she took her wedding flight, she unluckily missed her own color. How are we going to know that a queen has been purely mated (if Mr. Wheeler is correct), unless we keep her and test her down three or four generations?

JOHN D. A. FISHER.

Woodside, N. C.

Size of Brood-Chamber.

The brood-chambers of Thos. Rehoret's hives (page 262) are too much crowded. The hive should be at least 11 inches wide to give 1% for each frame. Bees do not winter well in a cold climate spread so thinly on the combs. If he would take one frame out and spread the others they would do, if they have plenty of good food. I prefer 9 Langstroth frames in a hive 13 inches wide; my bees then will winter well, and do not die with old age, as is claimed on page 264. Bees do not die with old age—they get chilled to death on the outside of the cluster in cold countries. Beekeepers lost heavily here last Winter. This has been a warm Winter, and they have not lost any.

J. H. BERRY.

Gales Creek, Oreg., Feb. 26, 1892.

Wintering Well—Italian Bees, etc.

So far the bees in this part of the country are wintering very well. Feb. 25 was a pleasant day, and as I had been confined to the house for nearly two months with the terrible *La Grippe*, I took a walk through my apiary, which I enjoyed very much, as those who have had *La Grippe* may suppose. I found

my bees in splendid condition, except one colony, and that had "the grippe," judging by its weakness. I notice a few writers are in favor of the common black bee, but while they are not objectionable at all, the Italians are far ahead of them, according to my knowledge. I had the blacks before I had the Italians, and I would sooner handle 50 colonies of the Italians than 25 blacks; and then the Italians are better honey-gatherers; they are also stronger, and are not so liable to be robbed. But we are living in a land of liberty, and as for choice, I will take the Italians every time. When is the best time to take the bees from the cellar to leave them out?

CHARLES E. FALKNER.

Pioneer, Ohio.

[When settled warm weather has come, is the proper time to finally take the bees from the cellar.—Ed.]

Convention Notices.

UTAH.—The Utah Bee-Keepers' Association will hold its annual convention in Salt Lake City, Utah, on April 7, 1899.

JOHN C. SWANER, Sec.
Salt Lake City, Utah.

COLORADO.—The Spring meeting of the Colorado State Bee-Keepers' Association will be held in Golden, Colo., on April 21, 1892.

E. B. PORTER, Pres.
H. KNIGHT, Sec., Littleton, Colo.

TEXAS.—The 14th annual meeting of the Texas State Bee-Keepers' Association will be held at Greenville, Hunt Co., Tex., on Wednesday and Thursday, April 6 and 7, 1892. All interested are invited. A. H. JONES, Sec.
Golden, Wood Co., Tex.

PENNSYLVANIA.—The tenth semi-annual meeting of the Susquehanna Co. Bee-Keepers' Association will be held at Bullard's Hotel in Brooklyn, Pa., on Thursday, May 5, 1892, at 10 a.m. All are cordially invited.

Harford, Pa. H. M. SEELEY, Sec.

Our Book—Bees and Honey.

A new (the eighth) edition of the well-known work, "Bees and Honey, or the Management of an Apiary for Pleasure and Profit," thoroughly revised and largely rewritten, is sent to us by Thos. G. Newman, the author, Chicago. It is a duodecimo volume of 250 pages, adorned with a great number of illustrations (including portraits of all the chief students of the bee, living and dead), and neatly bound in cloth. The price is \$1.—Country Gentleman.



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Special Notices.

Send us *one new* subscription, with \$1.00, and we will present you with a nice Pocket Dictionary.

The date on the wrapper-label of this paper indicates the end of the month to which you have paid. If that is past, please send us a dollar to pay for another year.

Systematic work in the Apiary will pay. Use the Apiary Register. It costs:

For 50 colonies (120 pages)	\$1 00
" 100 colonies (220 pages)	1 25
" 200 colonies (420 pages)	1 50

As there is another firm of "Newman & Son" in this city, our letters sometimes get mixed. Please write *American Bee Journal* on the corner of your envelopes to save confusion and delay.

YOU NEED an Apiary Register, and should keep it posted up, so as to be able to know all about any colony of bees in your yard at a moment's notice. It devotes two pages to every colony. You can get one large enough for 50 colonies for a dollar, bound in full leather and postage paid. Send for one before you forget it, and put it to a good use. Let it contain all that you will want to know about your bees—including a cash account. We will send you one large enough for 100 colonies for \$1.25; or for 200 colonies for \$1.50. *Order one now.*

Supply Dealers desiring to sell our book, "Bees and Honey," should write for terms.

We Club the American Bee Journal and the Illustrated Home Journal, one year for \$1.35. Both of these and Gleanings in Bee Culture, for one year, for \$2.15.

If You Have any honey to sell, get some Honey Almanacs and scatter in your locality. They will sell it all in a very short time.

Bee-Keeping for Profit, by Dr. G. L. Tinker, is a new 50-page pamphlet, which details fully the author's new system of bee-management in producing comb and extracted-honey, and the construction of the hive best adapted to it—his "Nonpareil." The book can be had at this office for 25c.

Please send us the names of your neighbors who keep bees, and we will send them sample copies of the BEE JOURNAL. Then please call upon them and get them to subscribe with you.

When talking about Bees to your friend or neighbor, you will oblige us by commending the BEE JOURNAL to him, and taking his subscription to send with your renewal. For this work we will present you with a copy of the Convention Hand-Book by mail, postpaid. It sells at 50 cents.

CLUBBING LIST.

We Club the *American Bee Journal* for a year, with any of the following papers or books, at the prices quoted in the **LAST** column. The regular price of both is given in the first column. One year's subscription for the *American Bee Journal* must be sent with each order for another paper or book:

	Price of both.	Club.
The <i>American Bee Journal</i>	\$1 00....	
and Gleanings in Bee-Culture.....	2 00....	1 75
Bee-Keepers' Guide.....	1 50....	1 40
Bee-Keepers' Review.....	2 00....	1 75
The Apiculturist.....	1 75....	1 65
Canadian Bee Journal.....	1 75....	1 65
American Bee-Keeper.....	1 50....	1 40
The 7 above-named papers.....	6 00....	5 00
and Langstroth Revised (Dadant).....	2 40....	2 25
Cook's Manual (1887 edition).....	2 25....	2 00
Quinby's New Bee-Keeping.....	2 50....	2 25
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The Lever (Temperance).....	2 00....	1 75
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Farm, Field and Stockman.....	2 00....	1 75
Prairie Farmer.....	2 00....	1 75
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Rural New Yorker.....	3 00....	2 25
Nebraska Bee-Keeper.....	1 50....	1 35

Do not send to us for sample copies of any other papers. Send for such to the publishers of the papers you want.

If You Want to know how Queens are fertilized in upper stories, while an old Queen is laying below—how to *safely* introduce Queens at any time when bees can fly—all about different bees, shipping Queens, forming nuclei, multiplying or uniting colonies, etc.—send us \$1.00 for "Doolittle's Queen-Rearing;" 170 pages; bound in cloth, and as interesting as a story.

Winter Problem in bee-keeping; by G. R. Pierce, of Iowa, who has had 25 years' experience in bee-keeping, and for the past 5 years has devoted all his time and energies to the pursuit. Price, 50 cents. For sale at this office.

The Convention Hand-Book is very convenient at Bee-Conventions. It contains a simple Manual of Parliamentary Law and Rules of Order for Local Bee-Conventions; Constitution and By-Laws for a Local Society; Programme for a Convention, with Subjects for Discussion. In addition to this, there are about 50 blank pages, to make notes upon, or to write out questions, as they may come to mind. They are nicely bound in cloth, and are of the right size for the pocket. We will present a copy for one new subscription to the *BEE JOURNAL* (with \$1.00 to pay for the same), or 2 subscribers to the *HOME JOURNAL* may be sent instead of one for the *BEE JOURNAL*.

When Writing a letter be sure to sign it. Too often we get letters with the name of the post-office, but no County or State. One such came recently, and we looked into the Postal Guide and found there were places by that name in 13 States. Be sure to stamp your letter, or it may go to the dead letter office, in Washington, D. C.

The Honey-Bee; Its Natural History, Anatomy and Physiology. By T. W. Cowan, editor of the *British Bee Journal*, 72 figures, and 136 illustrations. \$1.00. For sale at this office.

I KNOW an advertiser, says the *Shoe Recorder*, which took 10 per cent. of last year's profits and invested it in advertising. That is a good idea, and one that pays well.

A Nice Pocket Dictionary will be given as a premium for only one new subscriber to this *JOURNAL*, with \$1.00. It is a splendid little Dictionary—just right for the pocket. Price, 25 cents.

Trip-Hammer advertising is the kind that creates industries that make us marvel at their magnitude. How long would it take to shape the hot iron if a stroke was given this week and another six months hence? Constant pounding is what does the business.

HONEY AND BEESWAX MARKET.

CHICAGO, Mar. 5.—Fancy white comb selling at 16c.; other grades 10@14c. Extracted slow demand, 6½@7½c. Beeswax, 26c.
S. T. FISH & CO., 189 S. Water St.

NEW YORK, Mar. 5.—Little demand, sufficient supply. We quote: Fancy white 1-lb., 13@14c.; off grades, 11c.; buckwheat, 9c.—Extracted, California, white clover and basswood, 7@7½c.; Southern, 65@70c. per gallon. Beeswax, very scarce at 28@29c.
HILDRETH BROS. & SEGELKEN,
28-30 West Broadway.

KANSAS CITY, Mo., Mar. 5.—Demand slow, and market well supplied. White comb, 11lb. 14@15c.; dark, 9@12c. Extracted—White, 7½c.; dark, 5@6c. Beeswax, in light supply, and demand good, at 23@26c.
CLEMONS, MASON & CO.,
Cor. 4th and Walnut Sts.

CINCINNATI, Mar. 5.—Trade is quiet. Extracted, 5@8c. Choice comb honey, 14@16c. Beeswax is good in demand, at 23@25c. for good to choice yellow.
C. F. MUTH & SON,
Cor. Freeman & Central Aves.

NEW YORK, Mar. 4.—Demand for honey is small, with adequate supply. We quote: Fancy 1-lb. clover, 14c.; fair, 10@11c. Buckwheat, 8@9c. Fancy 2-lb. clover, 11c.; fair, 9@10c.; buckwheat, 7@8c. Extracted, clover, 7c. lb.; buckwheat, 6c. Beeswax, fair demand, 28@30
CHAS. ISRAEL & BROS., 110 Hudson St.

KANSAS CITY, Mo., Mar. 5.—Demand poor, with large supply of comb. We quote: Comb—1-lb. fancy, 15@16c.; dark, 12@13c. Extracted—White, 7@7½c.; dark, 5@6c. Beeswax—None in market; light demand.
HAMLIN & BEARSS, 514 Walnut St.

DETROIT, Mar. 5.—The demand for comb-honey is fair and supply moderate. We quote: Comb, 12@13c.; extracted, 7@8c. Beeswax in good supply, and light demand, at 25@26c.
M. H. HUNT, Bell Branch, Mich.

CHICAGO, Mar. 5.—Demand good and sufficient. We quote: Comb, 14@16c. Extracted, 6@7c. Beeswax, in light supply, and good demand, at 25@27c.
J. A. LAMON, 44-46 S. Water St.

MILWAUKEE, Mar. 5.—Demand fair and supply good, except of the best quality. We quote: Comb—choice, 1-lb., 15@16c.; fair, 13@14c.; dark, 10@12c. Extracted—white, in barrels or kegs, 7½@8c.; dark, 6@6½c. Beeswax, 23@28c.
A. V. BISHOP, 142 W. Water St.

SAN FRANCISCO, Mar. 4.—Demand good, supply small. We quote: Comb, 1-lb., 10@14c. Extracted, 5½@6½c. Beeswax, in light supply and good demand, at 23@25c.
SCHACHT, LEMCKE & STEINER,
16 Drumm Street,

MINNEAPOLIS, MINN., Mar. 5.—Demand is moderate, supply ample, and shipments coming in freely. We quote: White comb, 17@18 cts.; dark, 14@15c. Extracted, 10@10½c.
STEWART & ELLIOTT.

CHICAGO, Mar. 5.—Demand is now good supply is not heavy. We quote: Comb, best grades, 15@16c. Extracted, 6@8c. Beeswax, 26@27c. R. A. BURNETT, 161 S. Water St.

BOSTON, Mar. 4.—Demand is light, supply ample. We quote: 1-lb. fancy white comb, 14@15c.; extracted, 6@7c. Beeswax, none in market.
BLAKE & RIPLEY, 57 Chatham St.

ALBANY, N. Y., Mar. 5.—Demand is slow, supply not liberal, as stock is mostly in. We quote: White comb, 12@15c.; buckwheat and mixed, 8@12c. Extracted—Light, 7@7½c.; dark, 6@6½c. Beeswax—Supply light, and demand steady, at 28@29c.
H. R. WRIGHT, 326-328 Broadway.

NEW YORK, Mar. 5.—Demand is light, and supply large, except buckwheat comb. We quote: Fancy white comb, 12@14c.; buckwheat, 9@11c. Extracted—Clover and basswood in good demand at 6½@7c.; buckwheat in demand at 5@6c. Beeswax in fair demand at 26@28c.
F. I. SAGE & SON, 183 Reade St.

NEW YORK, Mar. 5.—Demand moderate, and supply reduced, with no more glassed 1-lb. nor paper cartons, 1-lb. We quote: Comb, 1-lb., 14@15c. Extracted—Basswood, 7½@7¾c.; buckwheat, 5½@6¼; Mangrove, 68@75c. per gal. Good demand for dark extracted honey. Beeswax, in fair supply, with small demand, at 26@27c.
F. G. STROHMEYER & CO., 122 Water St.

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Under this heading, Notices of 5 lines, or less, will be inserted at 10 cents per line, for each insertion, when specially ordered into this Department. If over 5 lines, the additional lines will cost 20 cents each.

WANTED—A No. of Colonies of Bees, Italians preferred. J. B. Stone, South Park, Kan 10A2t

WANTED—An agent in every county for our New "St. Joe Hive." St. JOSEPH APIARY CO., St. Joe, Mo. 10Atf

WANTED—Bee-keepers to send for my price and samples of Comb Foundation. JACOB WOLLERSHEIM, Kaukauna, Wis. 1Atf

WANTED—A situation in an apiary or hive manufactory. I am willing to make myself generally useful. J. W. TEFFT. 5Atf 318 Swan St., Buffalo, N. Y.

WANTED—To exchange Bees, Honey and Supplies for Cash or Tinners' Tools. J. A. BUCKLEW, Warsaw, Coshocton Co., O. 5Atf

WANTED—A situation in an apiary by a person of considerable experience. W. O. SCHOLL, Wellsville, Franklin Co., Kan.

TO EXCHANGE—A 10-inch Pelham Foundation Mill, in No. 1 order, for offers or cash. Write for Circular of Bee-Keepers' Supplies. JNO. NEBEL & SON, High Hill, Mo. 10A3t

WANTED—To sell 25 Colonies Italian Bees in 2-story 10-frame Improved L. Hives with 7 supers, combs built from foundation. Queens of Doolittle's and Alley's stock. 11D4t E. T. JORDAN, Harmony, Ind